

ABSTRACT

BACKGROUND

Lateral epicondylitis is the commonest chronic disabling painful condition of the elbow. Elbow pain and tenderness with resisted wrist extension are common manifestations in lateral epicondylitis. Recent studies have suggested Autologous Blood injection {ABI} to be a safe and effective therapy for tennis elbow.

OBJECTIVES OF STUDY

To evaluate the short term and long term results of autologous blood injection for the treatment of refractory lateral epicondylitis. To provide pain-free elbow.

STUDY DESIGN

PROSPECTIVE STUDY.

MATERIALS AND METHODS:

120 Patients over a period of 2 years from August 2016 to July 2018 with refractory lateral epicondylitis attending Department of Orthopaedics & Traumatology OPD at *Govt Rajaji hospital, Madurai* will be taken up for study after obtaining consent. All the patients selected for study will be examined according to protocol, associated injuries should be noted and clinical and lab investigations carried out in order to get fitness for procedure. Consent of the patient will be taken for procedure. Patients were taken 3 ml of autologous blood drawn from contra lateral upper limb mixed with 1 ml of 0.5 % bupivacaine. Patient in supine with elbow is flexed to 90 degree with palm facing down. Under asptic precautions needle is introduced proximal to lateral epicondyle along the supracondylar ridge into the tendon at the maximum point of tenderness. Pain(VAS) and NIRSCL Score& Hand grip will be assessed on follow-

up. Patient's clinical improvement will be assessed using NIRSCL SCORE & manual Hand grip clinically during every follow-up. Patient will be followed till **good functional outcome** is achieved **clinically**.

RESULTS

To our knowledge this study, perhaps the large group of 120 patients having refractory lateral epicondylitis participating with follow-up of 1 year. The evaluation of the patients was carried out by the degree of the pain and the amount of disability in the pre injection phase, and at subsequent outpatient visits at 1st week, 1,3, 6, and 12 months (the final follow up). The degree of pain was assessed by employing the Visual Analogue scale (VAS), the degree of disability was evaluated by Nirschl staging & functionally by Hand grip. Pre-injection average pain(VAS) score was 8.7 (range, 6-10), the average Nirschl stage was 6.4 (range, 5-7) & the Hand grip was 28.8(range 20-50%) . After autologous blood injections the average pain score decreased from 8.7 to 0.19, the average Nirschl stage decreased from 6.4 to 0.1 & Hand grip from 28.8 to 97.3 % at 1 year follow-up . Most number of patients dramatically improved with single injection. Only 3 patients(2.5 %) required another second episode of injection, those 3 patients also having some amount of improvement in VAS score, Nirschl score & Hand grip from pre-injection & first time ABI, second injection for achieving maximum improvement in functional & pain score. The significant maximal benefit was reached at an average of 5 weeks (range, 1 wk. to 10 wk.) after injection.

KEYWORDS

Autologous blood injection(ABI), lateral epicondylitis, VAS score, Nirschl score, hand grip